

Amendments to the Specification

Please replace original Paragraph [00027] (page 6, lines 17 to 24) with the following new paragraph:

--The present invention is directed to a vision system, method and apparatus utilizing spatial oscillation. As illustrated in Figure 1, the system includes a primary detector array 12 having detector elements 14 sensitive to an input image signal 16, means 18 for inducing a spatial oscillation in the image 16 relative to the primary detector array 12, and a filter 20 for filtering out the image signal according to the spatio-temporal motion signature of the induced oscillation so as to extract those elements whose motions do not reflect the induced oscillation, therein removing detector noise events to provide enhanced image quality and simplified post-processing.--

Please replace original Paragraph [00028] (page 6, line 25 to page 7, line 6) with the following new paragraph:

-- In an embodiment of the present invention, the induced oscillation means 18 is provided by a swept-frequency sinusoid chirp--22. In an embodiment of the present invention, the system further includes a secondary array 24 of opponent center/surround detectors 26 grouped by spatial orientation to provide multiple evenly-spaced orientations in the primary array 12 for receiving either positive or negative signal inputs at the center/surround detector's center, and receiving opposing input from primary detectors adjacent to a primary central detector, each center/surround detector fed by one or more detectors from the primary detector array, therein extracting improved de-noised, calibrated, contrast information and improved real-time spatial and velocity information.--

Please replace original Paragraph [00030] (page 7, lines 12 to 20) with the following new paragraph:

-- In an embodiment of the present invention, the spatial oscillation step is provided by a swept-frequency sinusoid chirp 104. In an embodiment of the present invention, the method further includes the step of receiving either positive or negative interpreted signal inputs at the center/surround detector's center, and receiving opposing input from primary detectors adjacent to a primary central detector, each center/surround detector fed by one or more detectors from the primary detector array, therein extracting improved de-noised, calibrated, contrast information and real-time, increased accuracy spatial and velocity information 106 . --